

DERWENT-ACC-NO: 1983-08941K

DERWENT-WEEK: 198304

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TITLE: Electrochemical measuring
elements - for oxidising or
reducing substances in aq.
soln.

----- KWIC -----

Whether the first (second) electrode is to act
as the anode (cathode)
depends on whether the material in the aq. soln.
having electrochemical
reversibility, is oxidising or reducing. The two
electrodes face each other a
short distance apart to allow the liq. subjected to
measurement to pass through
the second porous electrode. (J52009489)

DERWENT-ACC-NO: 1999-107238

DERWENT-WEEK: 200174

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TITLE: Control circuit for clocked
DC motor - has choke
connected between
positive/negative voltage supply to
motor and positive/negative
terminal of electrolytic
condenser plus freewheeling
diode

----- KWIC -----

A control circuit for a clocked DC motor has an electrolytic condenser and a freewheeling diode wired in parallel. Between the positive voltage supply to the motor and the positive terminal of the condenser is connected a choke. The diode lies with its cathode between the choke and the condenser along with its anode on the negative side of the motor. This is then repeated with 'positive' and 'negative' interchanged as well as with 'cathode' and 'anode' interchanged. Between the choke and the positive/negative supply voltage is wired an inversely driven n-channel power MOSFET as a protection against incorrect polarity connection.

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DERWENT-ACC-NO: 1976-C9374X

DERWENT-WEEK: 197613

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TITLE: Magneto-discharge vacuum
gauge - has potentiometer and
capacitor for compensating
capacitive current in
magnetron-type manometer

----- KWIC -----

To produce a manometer capable of measuring very low pressures, and to increase the life of the manometer, the proposed vacuum gauge of the magnetron type (1) consists of electrodes (2 and 3), each of which depending on the phase of the generating potential becomes either cathode or anode, an a.c. transformer (5) with high and low voltage secondary winding, a meter for measuring an a.c. ion current (6), and a compensating system including a potentiometer (9) and capacitor (10). When a high voltage potential is applied to the electrode (2) through a resistance (11), a discharge takes place in the manometer (1) in the presence of a magnetic field. The cathode is bombarded by ions, which means that both electrodes (2 and 3) are in turn bombarded by ions. As the result of sputtering of the cathode, the surface of the electrodes remains free of deposit. In order to increase the

range of measurements
towards low pressure; the current which is caused
by the capacitance of the
manometer (1) has to be compensated. This is done
by adjusting the resistance
(9) in the compensating system (8). Experiments
have shown that pressure
ranging between 102 and $5 \cdot 10^{-7}$ mm can be measured
by means of the device
described above.

DERWENT-ACC-NO: 1970-50432R

DERWENT-WEEK: 197028

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TITLE: Electrolysis or electric
permeation processes
commutation of electrode
polarity

----- KWIC -----

Polarity commutating electrode consists of cathode (Ti or Ta) and anode (e.g. Ti plated with Pt), each of which has a terminal for electric current application, and positioned so as not to be in contact. Current is applied to the anode or the cathode depending on whether the electrode is to be used as anode or cathode respectively.